नौसेना बाल विद्यालय:, चाणक्यपुरी

संस्कृत पाठ्यक्रम विभाजनम्- 2024-25

कक्षा- दशमी (X)

मासा:	पाठस्य नामानि	व्याकरणम्	क्रियाकलापाः
अप्रैल	पाठ -1 वाङ्मयं तपः	स्वरसन्धिः	श्लोकोच्चारणम् (समूहगायनम् )
	पाठ - २ नास्ति त्यागसमं सुखम्	अपठित गद्यांशः	
		चित्र वर्णनम्	
मई	पाठ -3 रमणीया हि सृष्टिः एषा	व्यंजनसन्धिः	रमणीया हि सृष्टिः एषा पाठम् अधिकृत्य
		विसर्गसन्धिः	अभिनयः (संवाद लेखनम्)
		संवाद लेखनम्	
जून/जुलाई	पाठ -4 आज्ञा गुरुणां हि	समासः - अव्ययीभावः	कथाकथनस्य अभ्यासः (कथापूर्तिः माध्यमेन)
	अविचारणीया	तत्पुरुषः, द्वन्द्वः	
	पाठ - 5 अभ्यासवशगं मनः	बहुव्रीहि:	
अगस्त	पाठ -6 राष्ट्रं संरक्ष्यमेव हि	प्रत्ययाः - मतुप्, ठक्, त्व,	चित्राणि दृष्ट्वा वाक्य निर्माणम्। (चित्र
	पाठ -7 साधुवृत्तिं समाचरेत्	तल्, टाप्, डीप्	वर्णनम् )
	पाठ - 11 किम् किम् उपादेयम्	संवाद लेखनम्	
	केवलं आन्तरिक मूल्यांकनाय )		
सितम्बर	अर्धवार्षिकी परीक्षा	अर्धवार्षिकी परीक्षा	
	पुनरावृत्तिः च	पुनरावृत्तिः च	

अक्टूबर	पाठ - ८ तिरुक्कुरल - सूक्ति -	वाच्यपरिवर्तनम्	पत्रपूर्तेः अभ्यासः कारयितव्यः ।
	सौरभम्	समयलेखनम्	
		कथापर्तिः	
		पठित गद्यांश:	
		पद्यांशः नाट्यांशः च	
नवंबर	पाठ - ९ सुस्वागतं भो!	अव्ययाः	समासयुक्तशब्दानां प्रयोगं कृत्वा
	अरुणाचलेऽस्मिन्	वाक्य शुद्धिः	संस्कृतसंभाषणस्य प्रस्तुतिः प्रदेया ।
	पाठ - 10–कालोऽहम् ( केवलम्	प्रश्ननिर्माणम्	
	आन्तरिक मूल्यांकनाय)		
दिसंबर	पुनरावृत्ति एवं व्याकरण अभ्यास	पत्रपूर्तिः	अन्वय लेखनस्य अभ्यासः
		कथापूर्तिः	
		अन्वयलेखनम्	
जनवरी	पुनरावृत्ति एवं व्याकरण अभ्यास	अपठित गद्यांशः	पाठे प्रदत्त अव्ययपदानां चयनं कृत्वा अर्थान्
		चित्रवर्णनम्	लिखत ।
		पत्रलेखनम्	
फरवरी/	पुनरावृत्ति एवं व्याकरण अभ्यास	संवाद लेखनम्	
मार्च		कथापूर्तिः	

# <u>NAVY EDUCATION SOCIETY</u> <u>CONDUCT OF COMMON ANNUAL EXAMINATION FOR AY 2024 - 25</u> <u>FOR NAVY CHILDREN SCHOOLS</u>

#### SPLIT-UP SYLLABUS SUBJECT – ENGLISH LANGUAGE AND LITERATURE(184)

CI 455-X

			CLASS-X		
Month	First Flight	Footprints Without Feet	Grammar	Writing	Subject Enrichment Activities
April	Prose- 1. A letter to God Poem-1. Dust of snow Poem-2. Fire and Ice Prose- 2. Nelson Mandela	L-1. A Triumph of Surgery L-2.The Thief's story	1.Tenses	1.Letter writing (Editor)	Imagine Lencho comes to know the truth about the money. Make a comic strip rewriting the climax of the story.
Мау	Prose-3.Two stories about flying Poem-3. A Tiger in the Zoo	-	2.Modals	-	Speaking activity-Share your experience on your initial attempts at learning a skill. Do you believe in mystery? -What can be an alternative ending to the story 'The Black Aeroplane'?
June	Prose-3.Two stories about flying (Cont) Prose-4.From the Diary of Anne Frank	L-3.The Midnight Visitor		2.Letter of Complaint	Prepare a poem on the topic 'A Chatterbox' and present it in class.
July	Poem-4. How to Tell Wild Animals Poem-5. The Ball Poem	L-4. A Question of Trust	3. Determiners	3. Analytical paragraph	ASL Listening skills Activity
August	Poem-6. Amanda Prose-5. Glimpses of India	L-5.Footprints without Feet	4. Subject- Verb concord 5. Reported Speech -Commands and Requests Statements Questions		Prepare a travel brochure on the sister state (as per CBSE directives)
September		L-6.The Making of a Scientist			
October	Poem-7. The Trees Prose-6. Mijbil the Otter Poem-8. Fog	L-7.The Necklace		4.Letter-Placing an order	ASL Listening skills Activity
November	Prose-7. Madam Rides the Bus Prose-10. The Sermon at Benares Poem-9. The Tale of Custard the Dragon	L-9.Bholi		5. Letter of Inquiry 6. Analytical Paragraph(cont)	Deliver a speech on empowerment of differently abled children in schools.
December	Poem-10. For Anne Gregory Prose-11. The Proposal	L-10.The Book that Saved the Earth	-		Role Play
January					

### **>** BLUE PRINT OR QUESTION PAPER PATTERN TO BE FOLLOWED AS PER CBSE.

			MATHE	NAVY CHILDREN SCHO MATICS SPLIT - UP SYLLA GRADE X				
S.No.	Month	Unit Name	Chap.No.	Chapter Name	No. of Period	Tentative No. of Working Days	Exam	Activitie s
		Number System	1	Real numbers	7			
1		Algebra	2	Polynomial Pair of linear equations in two variables (Cont)	4	16		
	April	Algebra	3		5			
2			3	Pair of linear equations in two variables	4			<u>Class X</u> <u>Activitie</u> <u>s 1 to</u> 10.pdf
L			4	Quadratic Equations Arithmetic	7	16	Chan Na	<u>10.pu</u>
	June	Algebra	5	Progressions	5		Chap.No. 1,2,3	
			UT/R	EVISION 1	15			
3		Geometry	6	Triangle	5	24		
5	July	Coordinate Geometry	7	Coordinate geometry	4	24		
		Statistics	14	Statistics	9			
4	August	Trigonometry	8	Introduction to Trigonometry (Cont)	14	23		
5	September	Probablity	15	Probability	4	21		<u>Class X</u> <u>Activities</u> <u>11 to</u> <u>20.pdf</u>
			TERM 1	PRE-BOARD	17		Chap.No.1 14	,2,3,4,5,6,7,8,
6	October	Trigonometry	9	Some Applications of Trigonometry	8	15		Class X Activities 21 to 30.pdf
		Geometry	10	Circle	7	-		
7	November	Mensuration	12	Area Related to Circle	6			
		Mensuration	13	Surface Areas and Volume	7	23		
		UT/REVISION II		10				
8	December				18	18	FULL POR	
9	January	REVISION		EVISION	20	20	Full Portion	
10	February and March	Revision ar Exa		Depend on Bo	ard Exam	32	Full portion	

### Note:

1. Deleted topics in the chapters are not to be assessed in the exams.

2. Deleted topics in various chapters are sent as separate attachments.

The activities mentioned are just suggested activities.
 The tentative number of working days has been calculated based on the vacation schedule of NES.

#### NAVY EDUCATION SOCIETY ,NAVY CHILDREN SCHOOL SCIENCE SPLIT UP SYLLABUS FOR ACADEMIC YEAR 2024-2025 CLASS X

MONTH	CHAP.	CHAPTER NAME	SUGGESTED ACTIVITIES
	No.		
		TERM 1	
APRIL	CH-1	CHEMICAL REACTIONS AND EQUATIONS	• Performing and observing the following
то		AND EQUATIONS	reactions and classifying them into: A. Combination reaction B. Decomposition reaction
JUNE			<ul> <li>C. Displacement reaction</li> <li>D. Double displacement reaction:</li> <li>(i) Action of water on quicklime (ii)Action of heat on ferrous sulphate crystals</li> <li>(iii) Iron nails kept in copper sulphate solution</li> <li>(iV) Reaction between sodium sulphate and barium chloride solutions.</li> </ul>
	CH-6	LIFE PROCESSES	<ul> <li>Preparing a temporary mount of leaf peel to show stomata.</li> </ul>
	CH-10	LIGHT REFLECTION AND REFRACTION	<ul> <li>Experimentally show that carbon dioxide is given out during respiration</li> <li>Focal length of concave mirror and convex lens</li> </ul>
			• Refraction of light through glass slab.

PT1	2.5 chapters	04 July 24 to 12 July24	PT1 Syllabus-Physics-Light reflection & refraction (till Glass slab) Chemistry –Chemical reactions & equations Biology-Life Processes
JULY	CH-6	CONTROL & COORDINATION	<ul> <li>Conduct an experiment to show photo-tropism</li> </ul>
	CH-2	ACIDS BASES AND SALTS	<ul> <li>Studying the properties of acids bases and salts.</li> <li>Finding the pH of different samples by using pH paper/universal indicator.: <ul> <li>(i) Dilute Hydrochloric Acid</li> <li>(ii) Dilute NaOH solution</li> <li>(iii) Dilute Ethanoic Acid</li> <li>(iV) Lemon juice</li> <li>(V) Water</li> <li>(vi)Dilute Hydrogen Carbonate</li> </ul> </li> </ul>
	СН-9	LIGHT REFLECTION AND REFRACTION (CONTD.)	<ul> <li>Image formation in convex lens.</li> <li>Tracing the path of the rays of light through a glass prism</li> </ul>
	CH-10	HUMAN EYE AND THE COLOURFUL WORLD (FULL CHAPTER)	

AUGUST	СН- 3	METALS AND NON- METALS	<ul> <li>Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:         <ul> <li>(i)ZnSO4(aq)</li> <li>(ii) FeSO4(aq) (iii)CuSO4(aq) (iv)Al2 (SO4)3(aq)</li> </ul> </li> </ul>
	CH-13	OUR ENVIRONMENT	<ul> <li>Make a chart of energy transfer in various tropic level.</li> </ul>
	CH-11	ELECTRICITY	Verification of Ohm's law
MID TERM/HY	7.5 chapters	06 Sep 24 to22 Sep 24	HY Syllabus-
····· · · · · · · · · · · · · · · · ·			Physics (2 chapters)- Light reflection and refraction Human eye and colorful world
			Chemistry (2.5 chapters)- Chemical reactions &equations Acid, bases and salts Metals and nonmetals (till properties of Ionic Compounds)
			Biology (3 chapters)- Life processes Control & coordination Our environment
SEPTEMBER			• Study of the comparative cleaning conscitu
	CH-4	CARBON AND ITS COMPOUNDS	<ul> <li>Study of the comparative cleaning capacity of a sample of soap in soft and hard water</li> </ul>
			<ul> <li>Studying binary fission in amoeba, and budding in yeast and hydra with the help of prepared slides</li> </ul>
	CH-7	HOW DO ORGANISMS REPRODUCE?	
	CH-11	ELECTRICITY(CONTD.)	

		TERM-2	
OCTOBER	CH-4	CARBON AND ITS COMPOUNDS	<ul> <li>Studying the properties of Acetic acid</li> </ul>
Syllabus completion by last week of October	CH-7	HOW DO ORGANISMS REPRODUCE?	<ul> <li>Identification of different parts of an embryo of a dicot seed (Pea, gram or red kidney bean)</li> </ul>
		HEREDITY	
	CH-8	MAGNETIC EFFECT OF ELECTRIC CURRENT	<ul> <li>Combination of resistors</li> </ul>
	CH-12		
NOVEMBER		Revision for Pre board exam	
		11 Nov -20 Nov 24	
First Preboard			
DECEMBER		5 Dec – 20 Dec 24	
Second Preboard			
JANUARY		Revision for board exam	
FEBRUARY		(REVISION FOR BOARD EXAMINATION)	
MARCH		BOARD EXAMINATION 24-25	

#### CLASS 10 PT-I EXAMINATION SCIENCE BLUEPRINT 24-25

	NAME OF CHAPTER	1MARKS	2MARKS	3MARKS	4MARKS CASE/DATA	TOTAL
		M(Q)	M(Q)	M(Q)	BASED M(Q)	M(Q)
PHYSICS	LIGHT REFLECTION	1(3)	2(2)	3(2)		13(7)
13 MARKS	AND REFRACTION					
	(TILL GLASS SLAB)					
CHEMISTRY	CHEMICAL	1(5)	2(2)		4(1)	13(8)
13 MARKS	REACTIONS AND					
	EQUATIONS					
BIOLOGY	LIFE PROCESSES	1(2)	2(1)	3(2)	4(1)	14(6)
14 MARKS						
SCIENCE	3 CHAPTERS	10(10)	10(5)	12(4)	8(2)	40(21)

#### HALF YEARLY EXAMINATION CLASS- X, SCIENCE BLUE PRINT 24-25

S.No.	NAME OF THE CHAPTER	1-MARK	2-MARKS	3-MARKS	5-MARKS	4-MARKS CASE/ DATA BASED	TOTAL
1	CHEMICAL REACTIONS AND EQUATIONS	1(5)	-	-	5(1)	-	10(6)
2	ACIDS, BASES AND SALTS	1(2)	2(1)	3(1)	-	4(1)	11(5)
3	METALS AND NONMETALS (TILL PROPERTIES OF IONIC COMPOUNDS)	1(1)	-	3(1)	-		4(2)
4	LIFE PROCESSES	1(3)	-	3(1)	-	4(1)	10(5)
5	CONTROL AND COORDINATION	1(6)	2(3)	3(1)	5(1)	-	20(11)
6	LIGHT-REFLECTION AND EFRACTION	1(1)	2(1)	3(1)	-	4(1)	10(4)
7	HUMAN EYE AND COLOURFUL WORLD	1(1)	2(1)	3(1)	5(1)	-	11(4)
8	ELECTRICITY	1(1)	-	3(1)	-	-	4(2)
	TOTAL	20(20)	12(6)	21(7)	15(3)	12(3)	80(39)

STREAM WISE WEIGHTAGE	CHAPTER NAME	1MARKS	2MARKS	3MARKS	5MARKS	CASE /DATA BASED 4M	CHAPTER WISE WEIGHTAGE /TOTAL MARKS
	CHEMICAL REACTIONS	3	-	1	-	-	6
CHEMISTRY-25	ACID, BASES & SALTS	3	-	-	-	-	3
	METALS & NON- METALS	1	1	1	-	1	10
	CARBON & ITS COMPOUNDS	1	-	-	1	-	6
	LIFE PROCESSES	3	1	1	-	-	8
BIOLOGY-30	CONTROL & COORDINATION	2	1	-	-	-	4
DIOLOGI-JU	HOW DO ORGANISMS REPRODUCE	1	-	-	1	-	6
	HEREDITY & EVOLUTION	3	-	-	-	1	7
	LIGHT- REFLECTION	-	-	2	-	1	10
	THE HUMAN EYE	-	1		-	-	2
PHYSICS-25	ELECTRICITY	2	-		1	-	7
	MAGNETIC EFFECTS	3	-	1	-	-	6
BIOLOGY	OUR ENVIRONMENT	-	1	1	-		5
TOTAL QUESTIONS		20	6	7	3	3	39
TOTAL MARKS		20	12	21	15	12	80

<b>CLASS 10 SCIENCE COMMON FINAL E</b>	EXAM BLUE PRINT 24-25
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CHAPTER NO.	CHAPTER NAME	1M	2M	3М	5M	CASE- BASED (4M)	TOTAL MARKS
1	Chemical reactions and equations	3		1			6
2	Acids, bases and salts	2		1			5
3	Metals and non- metals	2	1			1	8
4	Carbon and its compounds	1			1		6
6	Life Processes	3	2	1			10
7	Control & Coordination	1	1				3
8	How do organisms reproduce?				1		5
9	Heredity and evolution	3				1	7
15	Our Environment		1	1			5
10	Light Reflection and Refraction			1		1	7
11	Human Eye and the colorful world		1	1			5
12	Electricity	2			1		7
13	Magnetic effects of electric current	3		1			6
Total questions		20	6	7	3	3	39Q
Fotal marks		20	12	21	15	12	80Marks

- Section A comprises 16 MCQs and 4 Assertion-Reason questions
- Rest of the question paper will have the same format as Class X Sample Question Paper

# NAVY CHILDREN SCHOOL CLASS X SPLIT UP SYLLABUS SESSION 2024-25 SUBJECT- SOCIAL SCIENCE

Ser.	Month	Subject	Chapter	Subject Enrichment Activities
1.	April/May	History	Chap-5. Print Culture and the Modern World	Write an article about evolution of print.
		Geography	Chap-1. Resources and Development	Map Work: (Identification only) Major soil types Group activity: chart work- Land degradation/ conservation.
		Geography	Chap-2. Forests and Wildlife	Find out the importance of forests and wildlife as resources.
		Economics	Chap-1. Development.	Project Taken as for CBSE
		Democratic Politics	Chap-1. Power Sharing	Role play on power sharing Arrangement- Belgium and Sri Lanka.
		Economics	Chap-5. Consumer rights. Note: Chapter 5'ConsumerRights' to be done as Project Work.	Sustainable development.
2.	June/July	History	Chap-1. The Rise of Nationalism in Europe	Date line of unification of nationalism in Europe
		Economics	Chap-2. Sectors of The Indian Economy.	Charts/model depicting work done in various sectors. (Primary, secondary and tertiary)
		Democratic Politics	Chap-2. Federalism	Flowchart various forms of federalism

		Democratic Politics Geography Geography	Chap-3 Gender, Religion and Caste Chap-3. Water resources Chap-4. Agriculture	Debate: gender division and woman empowerment Caste and politics in India.Mapwork: Locating and labelling: Dams and multipurpose projectMap work: Major areas of Rice and Wheat Largest/Major producer states of Sugarcane, Tea,
3.	August	History	Chap-4. The Age of Industrialization	Coffee, Rubber, Cotton and Jute. Date line of development of Industrialization
		Geography	Chap-5. Minerals and Energy Resources	Mapwork Minerals: Iron ore mines Coal mines Oil fields Power plants (thermal & nuclear) Prepare a chart of energy sources and pattern of energy use in India.
		Democratic Politics Economics	Chap-4. Political Parties Chap-3. Money and	Role of opposition parties         in a democracy <b>Discussion:</b> party         systems-single, dual and         multiple         Role of financial institutions
		Geography	Credit Chap-6. Manufacturing Industries	in an economy. <b>Mapwork:</b> Iron and Steel Industry Software Technology Park Cotton textile industry
4.	September	History	Chap-3. Making of a Global World	Impact of globalization and growth of multinational companies in India.

		Economics	Chap-4. Globalization and the Indian Economy	Globalization and the Indian economy 2020.
5.	October	History	Chap-2. Nationalism in India	Map Work: Indian National Congress Sessions. Important Centers of Indian National Movement. Role played by Gandhiji in the Nationalist Movement in India. Find out about the forgotten heroes of the Nationalist Movement in India
		Geography	Chap-7. Lifelines of National Economy	Map work: Major Ports International Airports
		Democratic Politics	Chap-5. Outcomes of Democracy	Class discussion on moral of democracy
6.	November	Revision for p	bre board	1

# NAVY CHILDREN SCHOOL, MUMBAI

## SPLIT- UP SYLLABUS FOR AY 2024-25

## SUBJECT – ARTIFICIAL INTELLIGENCE (CODE- 417)

# CLASS-X

Month	Periods for Teaching	Practical	Chapter	Detailed SplitUp Syllabus	Learning Outcomes	Practicals
April	08		Part A– Employability Skills Part B – Subject Specific Skills	Part A - Employability Skills:         Unit 1: Communication Skills:         Methods         of communication, Verbal communication,         Non-verbal       communication,         Communication Cycle and Importance of         feedback, Barriers of effective         communication, Writing Skills – Part of         Speech, Writing Skills – Sentences         Part B – Subject Specific Skills         Unit 1: Introduction to Al- Foundational         Concepts of Al         What is intelligence? Decision Making,         What is Artificial Intelligence and what is         not?         Basics of Al: Let's Get started         Introduction to Al and related         terminologies, Introducing Al, ML, & DL,         Introduction to Al Domains (Data, CV &         NLP), Gamified tools for each domain ,         Applications of Al, Al ethics	<ul> <li>Understanding of human communication theories related to culture, self-concept, perception, listening, verbal and nonverbal communication.</li> <li>Learners will be able to prepare and deliver speeches effectively and participate in small group interactions.</li> <li>Flip learning on Communication skill.</li> <li>Understand the concept of human intelligence and its various components such as reasoning, problem-solving, and creativity.</li> <li>Understand the concept of Artificial Intelligence (AI) and its domains</li> <li>Learners to relate to application of Artificial Intelligence in their daily lives.</li> <li>Learn about the ethical concerns involved in AI development, such as A bias, data privacy and how they can be addressed.</li> </ul>	Activities suggested in CBSE study material Activity:Gamified tools for each domain Data Sciences- Impact Filter (Impact of rise in temperature on different species) https://artsexperiments.w ithgoogle.com/impactfilte r/ CV- Autodraw (It pairs machine learning with drawings from talented artists to help you draw stuff fast.) https://www.autodraw.co m/ NLP- Wordtune (AI writing tool that rewrites, rephrases, and rewords your writing) https://www.wordtune.co

						<u>m/</u>
						Moral Machine Activity : a platform for gathering a human perspective on moral decisions made by machine intelligence, such as self-driving cars. http://moralmachine.mit. edu/
May & June	04	-	Part A– Employability Skills	<ul> <li>Part A - Employability Skills:</li> <li>Unit 2: Self Management Skills         <ul> <li>Stress Management</li> <li>Self-awareness-Strength and Weakness Analysis</li> <li>Self-motivation</li> <li>Self-regulation—Goal Setting and Time Management</li> </ul> </li> <li>Unit 3: ICT Skills         <ul> <li>Basic Computer Operations</li> <li>Performing Basic File Operations</li> <li>Computer Care and Maintenance</li> <li>Computer Security and Privacy</li> </ul> </li> </ul>	<ul> <li>Students will learn about personal stressors and understand how they affecton their physical, mental, emotional, and spiritual well-being. Practicing mindfulness and self-reflection can enhance self-awareness in managing stress effectively.</li> <li>Students will learn how to Set SMART goals based on self-analysis helps in achieving personal and professional success</li> </ul>	

July	06	02	Part B – Subject Specific	Part B – Subject Specific Skills	<ul> <li>Identify the AI Project Cycle framework.</li> </ul>	
July	06	02		<ul> <li>Part B – Subject Specific Skills</li> <li>Unit 2 : Al Project Cycle</li> <li>Introduction: Introduction to Al Project Cycle <ul> <li>Problem Scoping</li> <li>Understanding problem scoping and Sustainable Development Goal</li> <li>Data Acquisition</li> <li>Data Exploration</li> <li>Visualizing Data</li> <li>Modelling</li> <li>Introduction to Rule Based &amp; Learning Based Al Approaches</li> <li>Evaluation</li> </ul> </li> <li>Unit 3 – Advance Python (To be assessed through practicals)</li> <li>Recap – <ul> <li>Jupyter Notebook</li> <li>Introduction to Python</li> <li>Python Basics</li> </ul> </li> </ul>	<ul> <li>framework.</li> <li>Learn problem scoping and ways to set goals for an Al project.</li> <li>Identify data requirements and find reliable sources to obtain relevant data</li> <li>Know various data exploration techniques and its importance</li> <li>Know about the different machine learning algorithms used to train Al models</li> <li>Understand, create and implement the concept of Decision Trees.</li> <li>Know the importance of evaluation</li> </ul>	Activity : Teachable machine to demonstrate Supervised Learning https://teachablemachine. withgoogle.com/ Activity : Infinite Drum Machine to demonstrate Unsupervised learning https://experiments.withg oogle.com/ai/drum- machine/view/ Introduction to Supervised, Unsupervised & Reinforcement Learning Models(Optional)** Neural Networks Jupyter Notebook, Introduction to Python, Python Basics

Aug	06	03	Part–B Subject Specific Skills	Part B – Subject Specific Skills Unit 4: Data Sciences (Theory) Introduction to Data Science, Applications of Data Science, Revisiting AI Project Cycle, Data Collection, Data Access	<ul> <li>Define the concept of Data Science and understand its applications in various fields.</li> <li>Understand the basic concepts of data acquisition, visualization, and exploration.</li> </ul>	Revisiting AI Project Cycle, Data Collection, Data Access Activities: Game: Rock, Paper & Scissors https://next.rockpapersci ssors.ai/
			Part–C Practical Work	Python Packages(Practical) Python data Sciences (Numpy, Pandas, Matplotlib), Statistics Learning & Data Visualization (Statistics and Standard Deviation) K-nearest neighbour model (Optional)** Personality Prediction, Understanding K-nearest neighbour	<ul> <li>Use Python libraries such as NumPy, Pandas, and Matplotlib for data analysis and visualization.</li> </ul>	Python for Data Sciences • Numpy • Pandas • Matplotlib
Sep	06	02	Part–B Subject Specific Skills Part–C Practical Work	modelPart B – Subject Specific SkillsUnit 5 – Computer Vision (Theory)Introduction to Computer Vision, Applications of CV, Understanding CV Concepts (Computer Vision Tasks, Basics of Images-Pixel, Resolution, Pixel value, Grayscale and RGB images)Open CV (Practical) Introduction to Open CV, Image Processing	<ul> <li>Define the concept of Computer Vision and understand its applications in various fields.</li> <li>Understand the basic concepts of image representation, feature extraction, object detection, and segmentation.</li> <li>Use Python libraries such as OpenCV for basic image processing and computer vision tasks.</li> </ul>	Activities: Game- Emoji Scavenger Hunt https://emojiscavengerhu nt.withgoogle.com/ RGBCalculator: https://www.w3schools.c om/colors/colors_rgb.asp Create your own pixel art: https://www.piskelapp.co m/
			Part A– Employability Skills	Part A - Employability Skills: Unit 4: Entrepreneurial Skills Entrepreneurship and Society, Qualities	<ul> <li>Flip learning by students on the Entrepreneurial skills</li> </ul>	Create your own convolutions: <u>https://setosa.io/ev/imag</u> <u>e-kernels/</u>

				and Functions of an Entrepreneur Myths about Entrepreneurship, Entrepreneurship as a Career Option Convolution Operator (Optional)** Convolution Neural Network (Optional)**		
Oct	02	-	Part A– Employability Skills Part–B Subject Specific Skills	<ul> <li>Part A - Employability Skills:</li> <li>Unit 5: Green Skills         <ul> <li>Sustainable Development</li> <li>Our Role in Sustainable Development</li> </ul> </li> <li>Part B - Subject Specific Skills</li> <li>Unit 6: Natural Language</li> <li>Processing</li> <li>Introduction to Natural Language</li> <li>Processing, NLP Applications, Chatbots</li> </ul>	<ul> <li>Flip learning by students on the Entrepreneurial skills</li> <li>Understand the concept of Natural Language Processing (NLP) and its importance in the field of Artificial Intelligence (AI)</li> </ul>	

Nov	06	01	Part–B Subject Specific Skills	<ul> <li>Human Language VS Computer Language, Text Processing, Data Processing, Bag of Words</li> <li>TFIDF(Optional)**, NLTK(Optional)**</li> <li>Part B – Subject Specific Skills</li> <li>Unit 7: Evaluation <ul> <li>Introduction to model evaluation</li> <li>Confusion Matrix</li> <li>Understanding Accuracy Precision, Recall &amp; F1 Score</li> </ul> </li> </ul>	<ul> <li>Explore the various applications of NLP in everyday life, such as chatbots, sentiment analysis, and automatic summarization.</li> <li>Learn about the Text Normalization technique used in NLP and popular NLP model - Bag-of-Words</li> <li>Understand Different types of Evaluation techniques Underfit, Perfect Fit, OverFit</li> <li>Model Evaluation Terminologies-The Scenario - Prediction, Reality, True Positive, True Negative, False Positive, False Negative Confusion</li> </ul>
Dec	04		Revision for Pre-Board Examination	Practice Evaluation	Matrix, Learn to make a confusion matrix for given Scenario • Learn about the different types of evaluation techniques in AI, such as Accuracy, Precision, Recall and F1 Score, and their significance.

\*\*NOTE: Optional components shall not be assessed. They are for extra knowledge